AMENDMENTS TO THE CLAIMS

Following is a listing of all claims in the present application, which listing supersedes all previously presented claims:

Listing of Claims:

1. (Currently amended) A method for ~~classifying~~ identifying types of defects of an object, comprising:

irradiating lights having different wavelengths onto the object to create an inspection spot on the object;

collecting scattered lights generated by the irradiated lights scattering from the inspection spot; ~~and~~

converting the collected scattered lights into signals; and

identifying ~~classifying~~ types of defects in ~~of~~ the object based on the signals ~~by type of defect by analyzing the scattered lights~~.

2. (Original) The method as claimed in claim 1, wherein irradiating lights having different wavelengths comprises:

irradiating a first light and a second light onto the inspection spot, wherein a first scattered light and a second scattered light are generated by the first light and the second light, respectively, scattering from the inspection spot.

3. (Original) The method as claimed in claim 2, wherein irradiating the first light and the second light further comprises:

generating a first polarized light and a second polarized light from the first light and the second light, respectively, using a polarizer,

wherein the first polarized light and the second polarized light are irradiated onto the inspection spot.

4. (Original) The method as claimed in claim 3, wherein the first polarized light and the second polarized light are two different lights selected from the group consisting of a primary polarized (P) light, a secondary polarized (S) light and a circular polarized (C) light.

5. (Cancelled)

6. (Currently amended) The method as claimed in claim 2 [[5]], further comprising:

providing a first light source for emitting the first light; and

providing a second light source for emitting the second light, wherein the second light source is positioned opposite to the first light source.

7. (Original) The method as claimed in claim 2, wherein irradiating the first light and the second light onto the inspection spot comprises:

irradiating a main light from a light source; and

generating the first light and the second light from the main light.

8. (Original) The method as claimed in claim 7, wherein the first light is directly generated from a first portion of the main light, and the second light is generated by changing a path of a second portion of the main light.

9. (Currently amended) The method as claimed in claim 8, further comprising:

providing a light path changing member including a first mirror passing the first portion of the main light to generate the first light and reflecting the second light to a second mirror, the second mirror reflecting the second light to a third mirror, ~~the second mirror corresponding to the first mirror~~, the third mirror reflecting the second light to a fourth mirror, ~~the third mirror being opposed to the second mirror~~, and the fourth mirror reflecting the second light onto the inspection spot, ~~the fourth mirror being opposed to the first mirror and corresponding to the third mirror~~, the first, second, third, and fourth mirrors forming four points, respectively, of a rectangular path for the second light;

wherein the first light and the second light are generated from the main light using the light path changing member, and the second light is irradiated onto the inspection spot by being reflected from the first, second, third, and fourth mirrors.

10. (Currently amended) The method as claimed in claim 9, wherein the second light reflected from the fourth mirror ~~passing the light path changing member~~ is irradiated onto the inspection spot from a direction opposite to a ~~the~~ direction of ~~from which~~ the first light passing through the first mirror ~~is irradiated~~ onto the inspection spot.

11. (Original) The method as claimed in claim 2, wherein a first polarized light and a second polarized light are generated using polarizers disposed on paths of the first light and the second light, respectively, and the first polarized light and the second polarized light are two different lights selected from the group consisting of a primary polarized (P) light, a secondary polarized (S) light and a circular polarized (C) light.

12. (Cancelled)

13. (Original) The method as claimed in claim 12, wherein the lights having different wavelengths are generated from a single light source.

14. (Currently amended) The method as claimed in claim 1, wherein the lights are irradiated onto an incident face of the object at an angle of about 10° to about 30° with respect to a surface of the incident face.

15. (Currently amended) The method as claimed in claim 1, wherein the scattered lights are collected at an angle in a range of about 40° to about 50° with respect to a direction of the irradiated lights toward the inspection spot ~~relative to irradiation directions of the lights with reference to the inspection spot~~.

16. (Currently amended) The method as claimed in claim 1, wherein identifying ~~classifying~~ the defects comprises [[:]] comparing the signals ~~combinations of scattering values of the scattered lights~~ to predetermined reference values. ~~; and~~

~~defining the defects of the inspection spot in accordance with types of the defects corresponding to the reference values.~~

17. (Cancelled)

18. (Currently amended) The method as claimed in claim 1, further comprising:

identifying ~~a~~ the type of defect with respect to size ~~having a specific type from all of the defects~~.

19. (Currently amended) An apparatus for ~~classifying~~ identifying types of defects of an object, comprising:

light creating means emitting lights having different wavelengths to create an inspection spot on the object; and

a detecting member capable of ~~for~~ collecting and converting scattered lights that are created from the lights scattering from the inspection spot into signals,

wherein the apparatus is capable of identifying all types of defects in the object based on the signals within about six minutes.

~~wherein the scattered lights are analyzed and classified in accordance with defects positioned on the inspection spot of the object.~~

20. (Original) The apparatus as claimed in claim 19, wherein the light creating means comprises:

a light source; and

a polarizer disposed on a path of the lights between the light source and the inspection spot to create polarized lights and to control characteristics of the polarized lights.

21. (Original) The apparatus as claimed in claim 20, wherein the polarizer generates one selected from the group consisting of a primary polarized (P) light, a secondary polarized (S) light and a circular polarized (C) light.

22. (Original) The apparatus as claimed in claim 21, wherein the polarizer comprises plates of about a 1/2 wavelength and about a 1/4 wavelength corresponding to the lights to create the polarized lights by combining the plates.

23. (Currently amended) The apparatus as claimed in claim 19, wherein the light creating means comprises at least one laser source for irradiating the lights onto the object within a range of angles of about 10° to about 30° with respect to a surface of the object.

24. (Currently amended) The apparatus as claimed in claim 19, wherein the detecting member comprises:

at least one detector disposed above a surface of the object within a range of angles of about 40° to about 50° relative to a directions of the emitted lights toward ~~with respect to~~ the inspection spot.

25. (Currently amended) A method for ~~classifying~~ identifying types of defects of an object, comprising:

irradiating a first light onto the object to create an inspection~~s~~ spot on the object;

collecting a first scattered light created by the first light scattering from the inspection spot using a first detector to form a first set of data;

irradiating a second light to the inspection spot;

collecting a second scattered light created by the second light scattering from the inspection spot using a second detector to form a second set of data; and

identifying ~~classifying~~ types of defects in ~~on~~ the object ~~by type of defect by analyzing the first scattered light and the second scattered light~~ based on the first and second data sets in about three minutes.

26. (Currently amended) The method as claimed in claim 25, wherein the first light and the second light are oppositely irradiated onto the inspection spot within a range of angles of about 10° to about 30° relative to an irradiated surface of the object.

27. (Original) The method as claimed in claim 25, wherein the first scattered light and the second scattered light are collected within a range of angles of about 40° to about 50° relative to irradiating directions of the first light and the second light with respect to the inspection spot.

28. (Original) The method as claimed in claim 25, wherein the first polarized light and the second polarized light are two different lights selected from the group consisting of a primary polarized (P) light, a secondary polarized (S) light and a circular polarized (C) light.

29. (Currently amended) An apparatus for ~~classifying~~ identifying types of defects of an object, comprising:

a first light source irradiating a first light onto the object for creating an inspection spot on the object;

a first detector collecting a first scattered light that is created from the first light scattering from the inspection spot;

a second light source irradiating a second light onto the inspection spot; and

a second detector collecting a second scattered light that is created from the second light scattering from the inspection spot,

wherein the apparatus is capable of identifying all types of defects in the object based on the collected scattered light in about 3 minutes.

~~wherein the first and second scattered lights are analyzed and classified according to defects positioned on the inspection spot of the object.~~

30. (Currently amended) The apparatus as claimed in claim 29, wherein the first light source and the second light source are disposed to face one another at opposite sides of the object and at ~~with each other with respect to the inspection spot to irradiate the first light and the second light to the object within~~ a range of angles of about 10° to about 30° with respect to a surface of the object.

31. (Currently amended) The apparatus as claimed in claim 29, wherein the first detector and the second detector are disposed above a surface of the object within a range of angles of about 40° to about 50° relative to directions of the lights toward ~~on the basis of~~ the inspection spot.

32. (Original) The apparatus as claimed in claim 29, further comprising:

a first polarizer disposed on a path of the first light and including plates of about a 1/2 wavelength and about a 1/4 wavelength to generate one selected from the group consisting of a primary polarized (P) light, a secondary polarized (S) light and a circular polarized (C) light from the first light; and

a second polarizer disposed on a path of the second light and including plates of about a 1/2 wavelength and about a 1/4 wavelength to generate one selected from the group consisting of a primary polarized (P) light, a secondary polarized (S) light and a circular polarized (C) light from the second light.

33. (Currently amended) A method for classifying defects of an object, comprising:

irradiating a main light onto the object to create an inspections spot on the object;

creating a first light and a second light by splitting the main light;

collecting a first scattered light created by the first light scattering from the inspection spot using a first detector;

collecting a second scattered light created by the second light scattering from the inspection spot using a second detector; and

converting the collected first and second scattered lights into signals; and

identifying ~~classifying~~ types of defects in ~~on~~ the object based on the signals ~~by type of defect by analyzing the first scattered light and the second scattered light~~.

34. (Currently amended) The method as claimed in claim 33, further comprising:

providing a light path changing member including a first mirror passing the first portion of the main light to generate the first light and reflecting the second light to a second mirror, the second mirror reflecting the second light to a third mirror, ~~the second mirror corresponding to the first mirror~~, the third mirror reflecting the second light to a fourth mirror, ~~the third mirror being opposed to the second mirror~~, and the fourth mirror reflecting the second light onto the inspection spot, ~~the fourth mirror being opposed to the first mirror and corresponding to the third mirror~~, the first, second, third, and fourth mirrors forming four points, respectively, of a rectangular path for the second light,

wherein the first light and the second light are generated from the main light using the light path changing member, and the second light is irradiated onto the inspection spot by being reflected from the first, second, third, and fourth mirrors.

35. (Original) The method as claimed in claim 33, wherein a first polarized light and a second polarized light are created using polarizers disposed on a path of the first light and on a path of the second light, respectively, wherein the first polarized light and the second polarized light are two different lights selected from the group consisting of a primary polarized (P) light, a secondary polarized (S) light and a circular polarized (C) light.

36. (Currently amended) An apparatus for ~~classifying~~ identifying types of defects of an object, comprising:

a light source irradiating a main light onto the object for creating an inspection spot on the object;

a light path changing member creating a first light by passing therethrough a first portion of the main light and a second light by changing a path of a second portion of the main light, and directing a path of the second light to the inspection spot;

a first detector collecting a first scattered light that is created from the first light scattering from the inspection spot; and

a second detector collecting a second scattered light that is created from the second light scattering from the inspection spot,

wherein the first and second scattered lights are analyzed and classified according to defects positioned on the inspection spot of the object.

37. (Currently amended) The apparatus as claimed in claim 36, wherein the light path changing member comprises a first mirror passing the first portion of the main light to generate the first light and reflecting the second light to a second mirror, the second mirror reflecting the second light to a third mirror, ~~the second mirror corresponding to the first mirror~~, the third mirror reflecting the second light to a fourth mirror, ~~the third mirror being opposed to the second mirror~~, and the fourth mirror reflecting the second light onto the inspection spot, ~~the fourth mirror being opposed to the first mirror and corresponding to the third mirror~~, the first, second, third, and fourth mirrors forming four points, respectively, of a rectangular path for the second light.

38. (Original) The apparatus as claimed in claim 36, further comprising:

a first polarizer disposed on a path of the first light and including plates of about a 1/2 wavelength and about a 1/4 wavelength to generate one light selected from the group consisting of a primary polarized (P) light, a secondary polarized (S) light and a circular polarized (C) light from the first light; and

a second polarizer disposed on a path of the second light and including plates of about a 1/2 wavelength and about a 1/4 wavelength to generate one selected from the group consisting of a primary polarized (P) light, a secondary polarized (S) light and a circular polarized (C) light from the second light.